

**FIG. 1**  
**PRIOR ART**

200

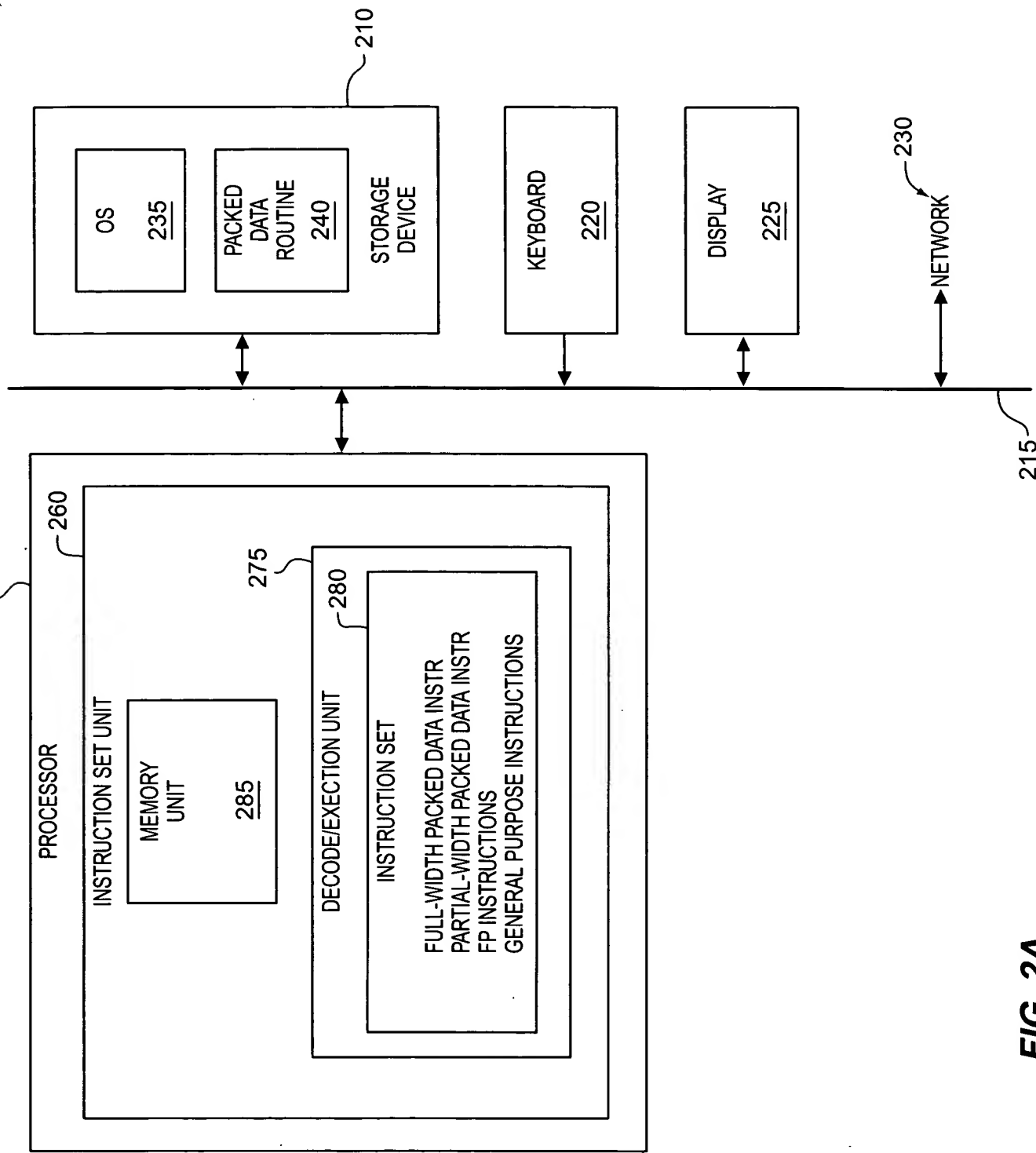


FIG. 2A

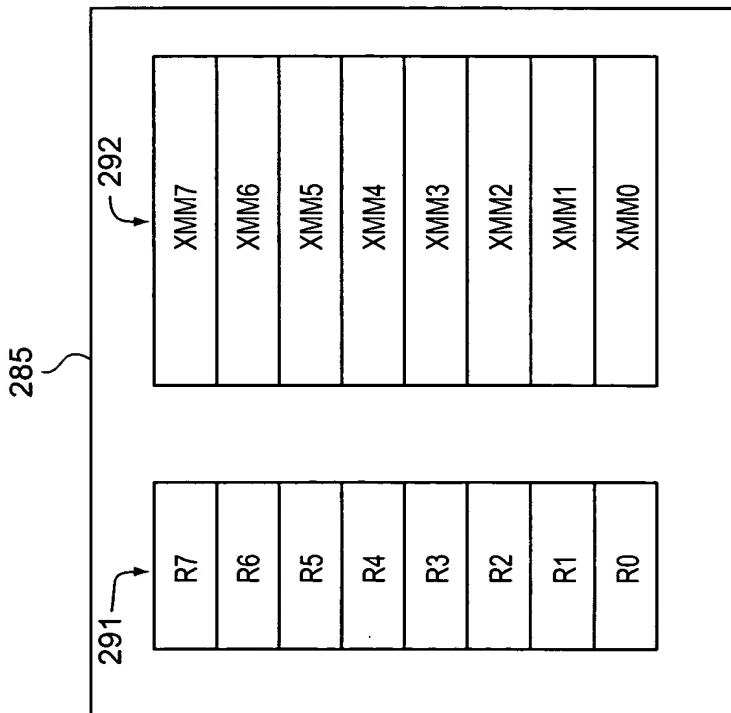


FIG. 2B

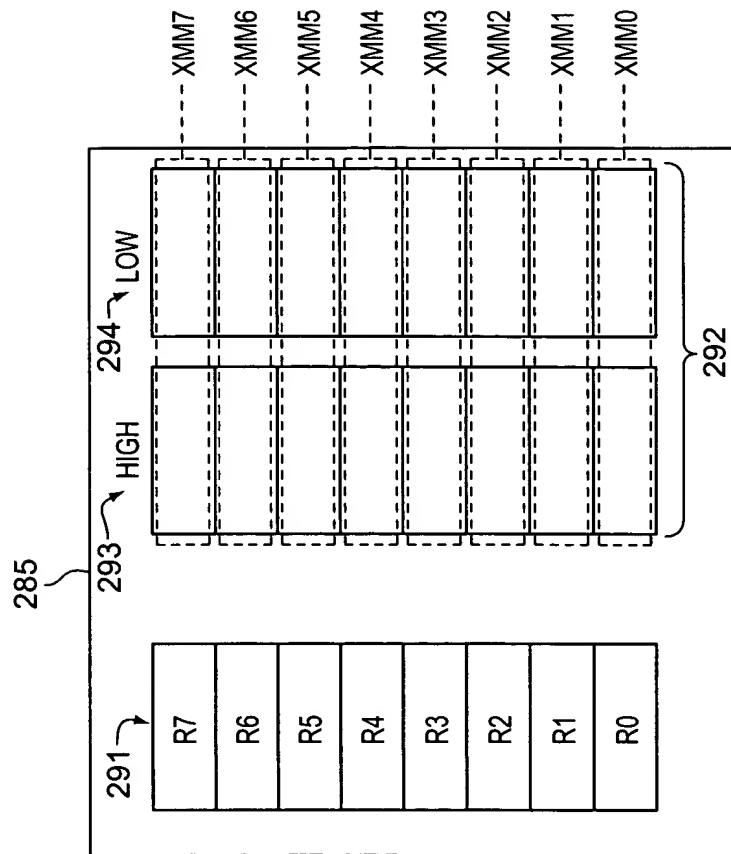
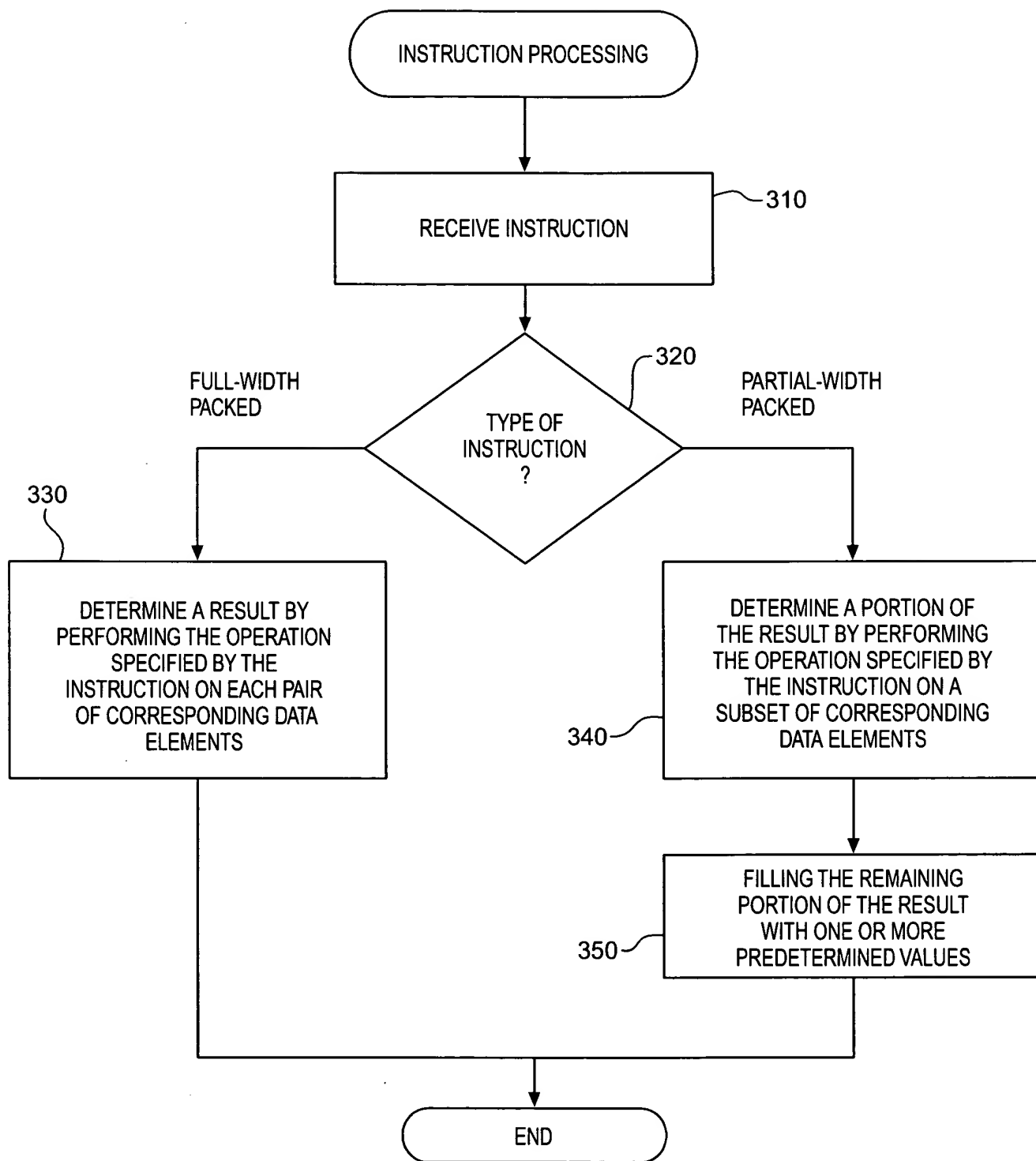
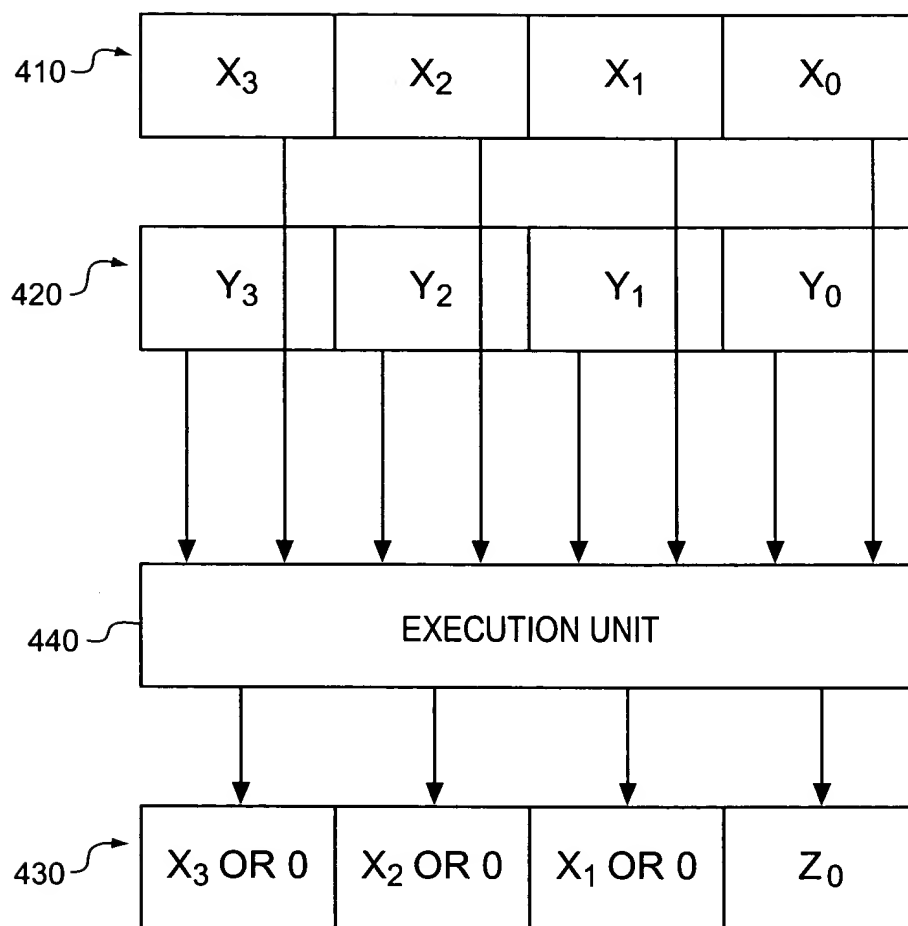


FIG. 2C

0985217.050801  
TOP SECRET



**FIG. 3**



**FIG. 4**

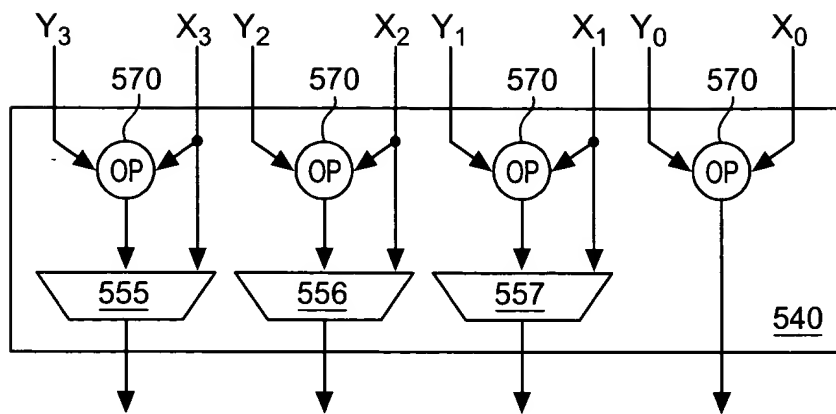


FIG. 5A

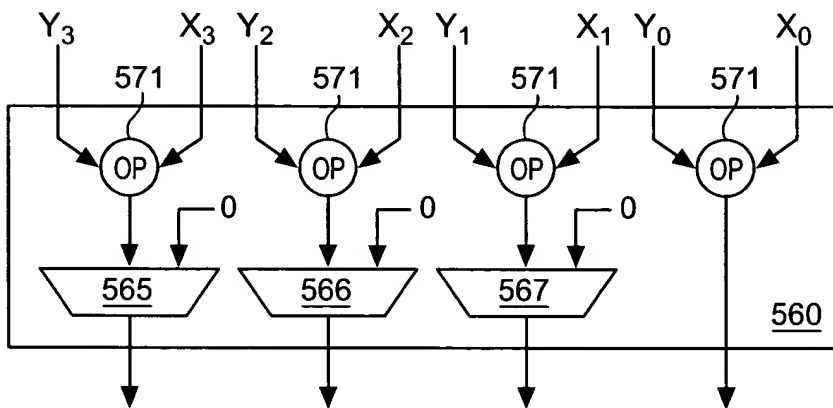


FIG. 5B

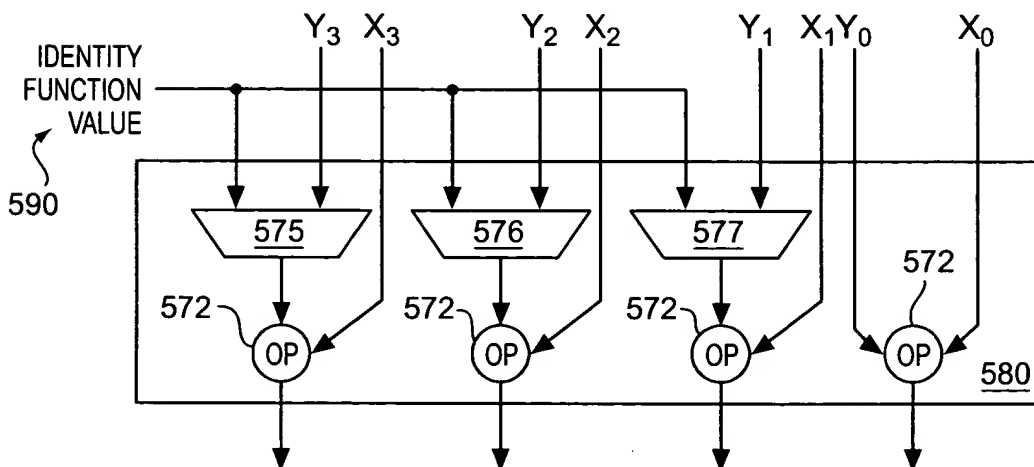
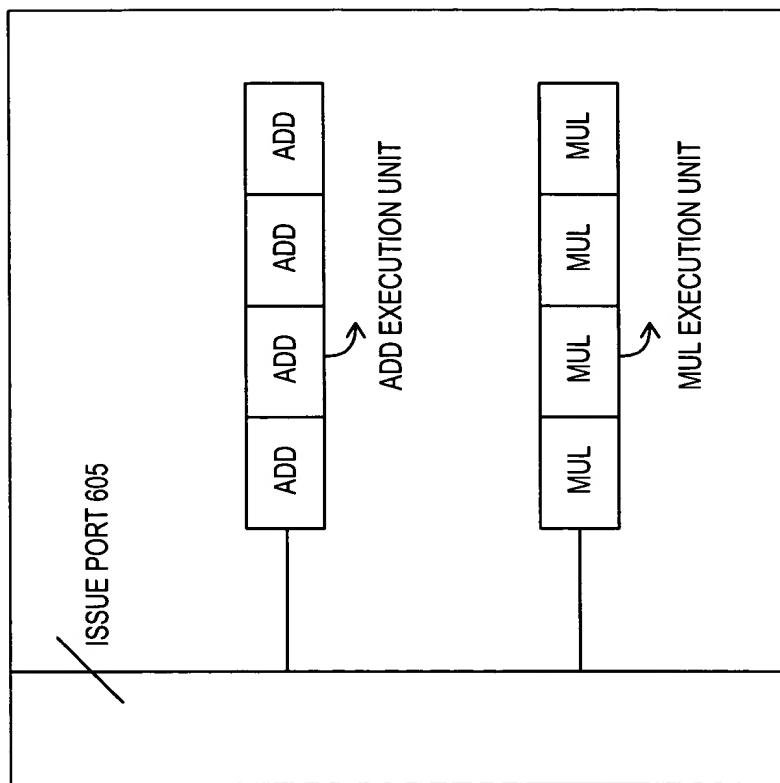


FIG. 5C



**FIG. 6**

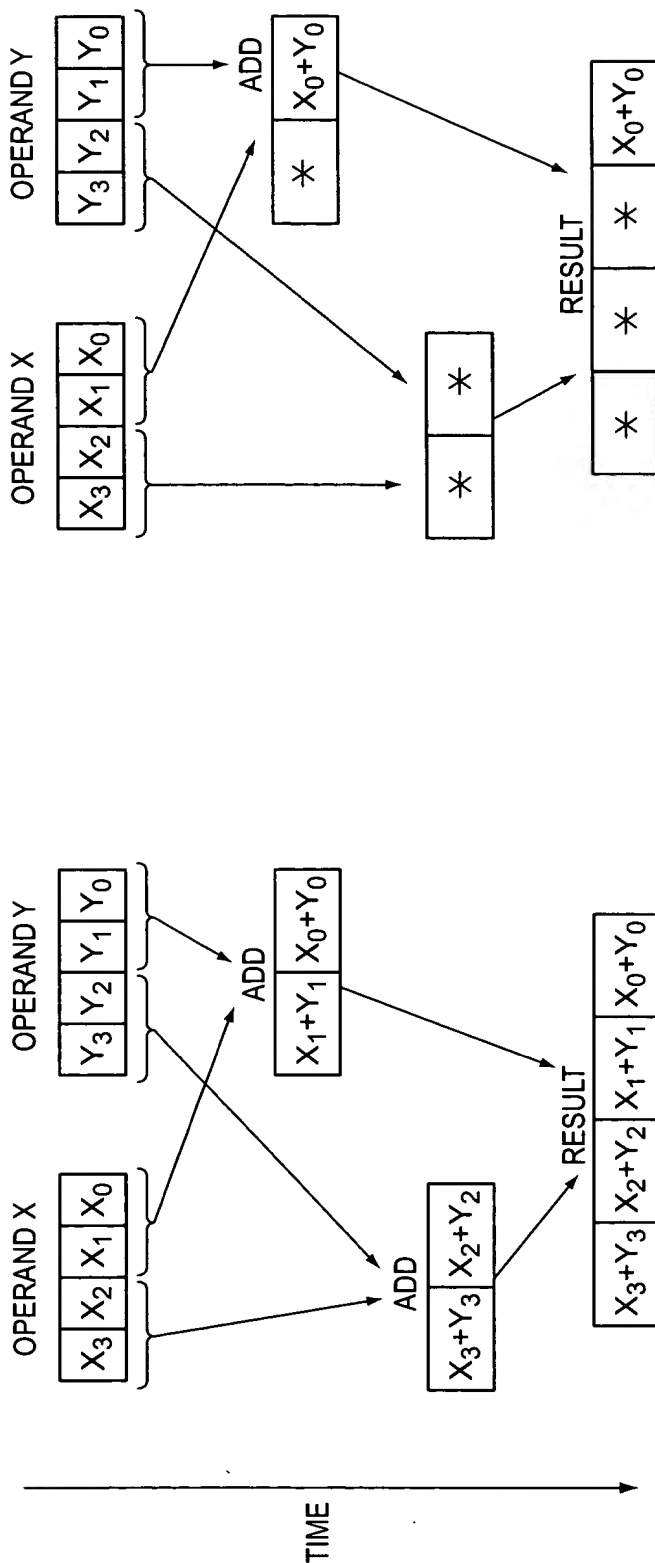


FIG. 7A

\* = CORRESPONDING DATA ELEMENT  
IN X OR Y, NaN, 0, OR OTHER  
PREDETERMINED VALUE

FIG. 7B



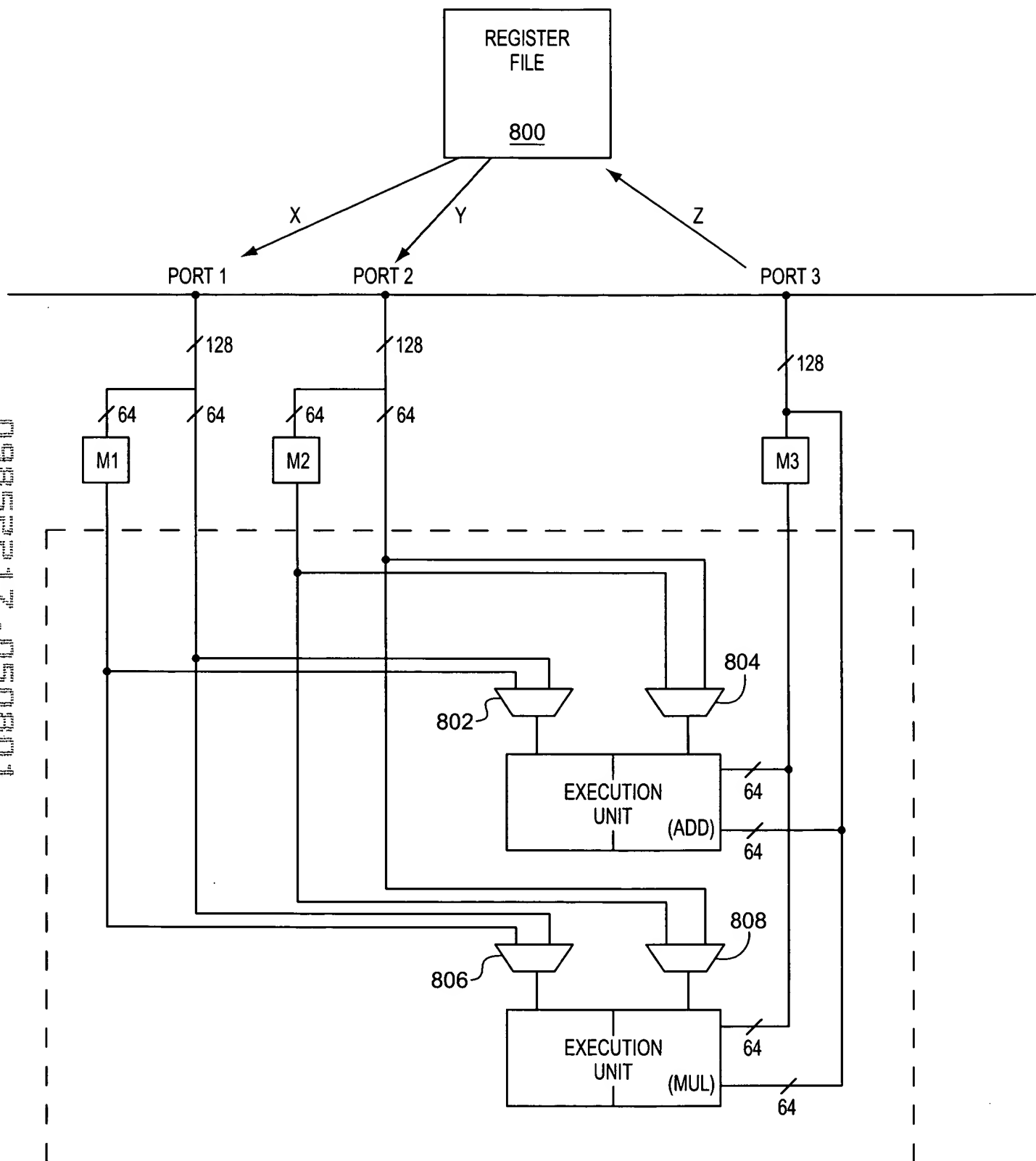


FIG. 8A

TIME	128-BIT INSTRUCTION	PERFORMED ON 64-BIT DATA
T	ADD X, Y	ADD X <sub>0</sub> Y <sub>0</sub> ADD X <sub>1</sub> Y <sub>1</sub>
T+1		ADD X <sub>2</sub> Y <sub>2</sub> ADD X <sub>3</sub> Y <sub>3</sub>
T+1	MUL X, Y	MUL X <sub>0</sub> Y <sub>0</sub> MUL X <sub>1</sub> Y <sub>1</sub>
T+2		MUL X <sub>2</sub> Y <sub>2</sub> MUL X <sub>3</sub> Y <sub>3</sub>

FIG. 8B

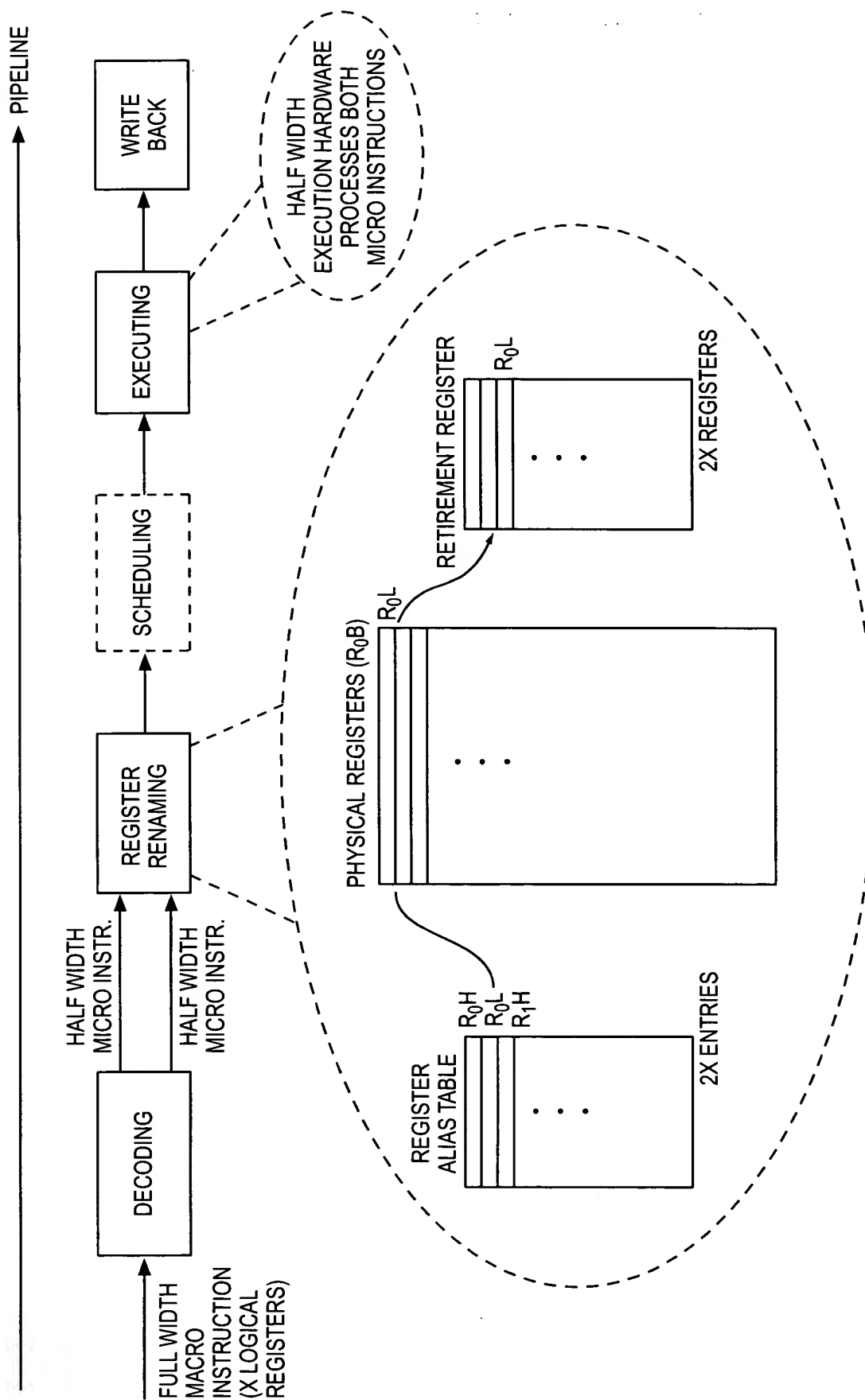


FIG. 9

TIME	128-BIT INSTRUCTION	64-BIT INSTRUCTION
T	ADD X,Y	ADD X <sub>L</sub> ,Y <sub>L</sub>
T+N		ADD X <sub>H</sub> ,Y <sub>H</sub>

FIG. 10

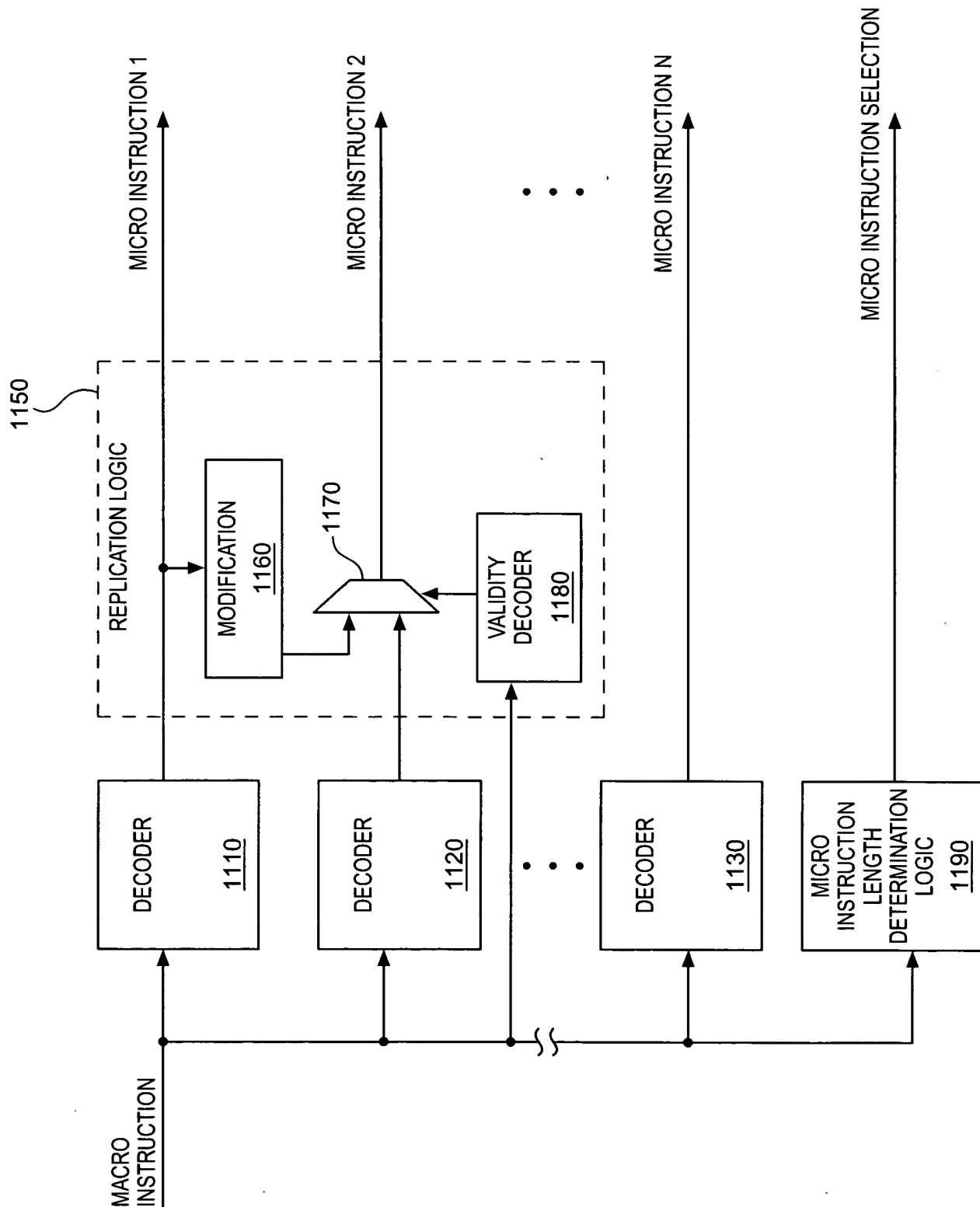


FIG. 11